

# Impact of nutritional education on the knowledge of mothers of school going children in district Sonapat, Haryana

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A nutritional survey was conducted on 50 rural mothers of school children (7-9 years) of Sonapat district in Haryana state. The nutritional knowledge of these mothers was studied using pre-testing questionnaire. Nutrition education was imparted and mothers knowledge was assessed. The result revealed that majority of rural mothers had inadequate level score (below 33%) of nutrition knowledge about the various concept of foods and nutrition viz., importance of balanced diet, sources of various nutrient in diet, nutrient deficiency disorders, cooking practices, importance of GLVs and fruits in diet and conservation of nutrients. But after imparting nutrition education with the help of charts, posters and pamphlets etc. for one month to rural mothers, it improved considerably. After imparting nutrition education it was found that most of the mothers got marginally adequate scores (33 to 65%) about importance of balanced diet, sources of various nutrient in diet, nutrient deficiency disorders, cooking practices, importance of GLVs and fruits in diet and conservation of nutrients. Majority of the mothers got adequate scores (above 66%) about the concept of cooking practice and importance of balanced diet.

**Key Words :** Nutritional knowledge, Rural mothers, Questionnaire, School children, Pamphlet, Poster and chart

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## INTRODUCTION

Nutrition plays a vital role in the development of the quality that helps achieving a high level of public health through a balanced and nutritious diet (Rana and Hussain, 2001). School age is a time for acquisition of skills that permits independence in eating and development of food likes and dislikes. Many school children continue to reject many foods especially vegetables, milk and milk products. This choosy type of behavior in selection of food stuff effects their health status (Gain, 2007). Dietary habits of vulnerable set of population must be improved for long term effect on the health of children by imparting nutrition education. Nutrition awareness entirely depends on education and training. Nutrition education results not only in gain in knowledge and improvement in feeding practice of children (Awasthi and Kumar, 2009). Good nutrition

education is followed effectively can prove to be useful tool to bring economic development in the country as it provides good health. So, nutrition education is essential for all age groups and at all times.

Keeping all these perspectives into consideration, the present study was undertaken with the objective to impart nutrition knowledge to the mothers of school children.

## METHODOLOGY

### Locale of the study:

The study was conducted in Sonapat district of Haryana state.

### Selection of blocks and villages:

The present study was envisaged selection of three blocks i.e. Mundlana, Kathura and Gohana by simple random sampling. The list of villages from these three blocks of Sonapat district was obtained from the office of Block Education Officer. Two villages from each block i.e. Baroda Mor and Baroda Thothan from Mundlana block, Kathura and Kahelpa villages from Kathura block, Riwara and Giwana villages from Gohana block were selected by simple random sampling. Selection of

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respondents: The sample of rural mothers (N=50) was drawn proportionately from the randomly selected six villages of Sonapat district for collection of information on some parameters and imparting nutrition education to the Construction of interview schedule: A pre-tested semi structured questionnaire-cum-interview schedule was prepared by consulting existing literature. The questionnaire contained same statements to judge the nutrition knowledge of the selected mothers. Field procedure and data collection: The data were collected by the researcher with the help of questionnaire-cum-interview schedule by paying repeated visits to the study area. Responses were obtained to meet the requirement of the laid down objectives of the study which included information on nutrition knowledge of mothers. In the initial stages, friendly situation was built up so as to develop efficient report with the respondent mothers. For the purpose of quantifying and qualitative data related to assessment of the extent of knowledge, a close ended knowledge inventory was prepared and responses were obtained under 'Yes' or 'No' categories at the initial period *i.e.* before imparting nutrition education. Correct answer was given score 'one' and incorrect answer was given score 'two'. After one month again the responses were obtained for assessing the gain in nutritional knowledge scores. Aggregated scores computed to find out the pre and post knowledge scores and gain in knowledge was determined.

**Gain in nutrition knowledge of mothers:**

Nutritional knowledge was imparted to mothers using package of visual aids with different types of teaching methods. Some suitable teaching materials including charts, posters, leaflets, pamphlets etc. were developed for imparting nutritional knowledge to the mothers regarding diet, importance of balanced diet, sources of nutrients, cooking practice, importance of GLV and fruits in diet, nutrient deficiency disorders and conservation of nutrients etc. Gain in knowledge was assessed by testing pre and post knowledge levels within one month on weekly basis.

**OBSERVATIONS AND ASSESSMENT**

The result of the present study have been discussed in detail as under:

**Impact of nutrition education on selected mothers:**

Mean scores of nutrition knowledge of mothers are given in Table 1. Nutritional knowledge of mothers was studied regarding the concept of importance of balanced diet, sources of nutrients, cooking practice, importance of GLV and fruits in diet, nutrient deficiency disorders and conservation of nutrients etc.

Before imparting nutrition education, mothers had marginally adequate nutrient knowledge about the

Topic	Pre-Test Score (Mean ± SD)	Post-Test Score (Mean ± SD)	Gain in Score (Mean ± SD)
Concepts of balanced diet	31.5 (33.6376)	50.0 (36.0174)	18.5 (2.3797)
Sources of nutrients	10 (33.6376)	33.7 (36.0174)	23.7 (3.3800)
Cooking practice	35.2 (33.6376)	55.0 (36.0174)	19.8 (2.3797)
Importance of GLV and fruits in diet	100.0 (33.6376)	100.0 (36.0174)	0.0 (0.0000)
Nutrient deficiency disorders	55.0 (33.6376)	72.0 (36.0174)	17.0 (2.3797)
Conservation of nutrients	55.0 (33.6376)	75.0 (36.0174)	20.0 (2.3797)

importance of balanced diet (37.5%), sources of nutrients (10.40%), cooking practices (36.2%) and conservation of nutrients (55.0%). The respondents had inadequate knowledge about the importance of balanced diet (62.5%), sources of nutrients (89.6%), cooking practices (63.8%) importance of GLVs and fruits in diet (100%), nutrients deficiency disorders (100%) and conservation of nutrients (45.0%). After imparting nutrition education to mothers by using audio visual aids, about 50 per cent of mothers got adequate knowledge regarding importance of balanced diet, sources of nutrients (33.7%), cooking practices (55.0%), importance of GLVs and fruits in diet (34.4%), nutrient deficiency disorders (42.0%) and conservation of nutrients (41.0%). Knowledge level of marginally adequate also improved after imparting nutrition education. Marginally adequate knowledge was observed about importance of balanced diet (50.0%), source of nutrients (66.3%), cooking practices (45.0%), importance of GLVs and fruits in diet (65.6%) nutrient deficiency disorders (58.0%) and 59.0 per cent mothers got adequate knowledge about need of conservation of nutrients. After imparting nutrition education mothers having inadequate knowledge regarding various aspects of nutrition also improved and none of the women had inadequate knowledge after nutrition education. Bhalerao *et al.* (2008) also reported that maternal nutritional knowledge had effect on the diet intake of school children Devavi *et al.* (2009) also reported a positive and significant correlation between attitude and practices.

#### Conclusion:

There was sufficient gain in knowledge after imparting

nutrition education to the rural mothers of school children. The results obtained, thus emphasize that there is need of nutrition and health education to the mothers of the children so that they understand about balanced diet and importance of all the food groups and nutrients in diet. They should be guided to include all food groups in proper amount in their daily diets for improving their nutritional status.

#### LITERATURE CITED

- Awasthi, N. and Kumar, A.R.** (2009). Nutritional status of primary school children of Nanital G.B. Pant University of Agriculture and technology Pantnagar. Abstracted in abstract book of national seminar on nutritional strategies for improving quality of life held at Uttarakhand.
- Bhalerao, V.S., Shaikh, R.M. and Galkwad, S.R.** (2008). Self-esteem, decision making, mental health and knowledge awareness on parenting among rural women. *Asian J. Home Sci.*, **3**(1): 4-6.
- Devaki, C.S., Saraswathi, G., Mathura, C.V., Swamy, V.S.S., Vasudheesh, C.P. and Premavalli, S.** (2009). Impact of supplementation of flaxseed based as mid morning snacks on school children. *Indian J. Nutri. Dietet.*, **46**: 192-197.
- Gain** (2007). Global alliance for impact nutrition, micronutrient malnutrition.
- Rana, K. and Hussain, M.** (2001). Body weight status of pre-school children belonging to high income groups in relation to nutrient intake. *Indian J. Nutri. Dietet.*, **39**: 236-241.

#### ■ WEBLIOGRAPHY

[http://www.ifpri.org/media/20070723\\_sprinkles/sprinklesfs.pdf](http://www.ifpri.org/media/20070723_sprinkles/sprinklesfs.pdf)

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